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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,613	08/22/2003	Shunpei Yamazaki	0756-7190	8274

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EXAMINER	
DUONG, TAI V	
ART UNIT	**PAPER NUMBER**
2871	

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/645,613	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	Tai Duong	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-24 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 08/024,946.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/22/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,618,105. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between the instant claims and the patent claims is the omission of the feature "wherein a thickness of said layer is 2.5-10 μm" from the patent claims. The instant claims are broader in scope than the patent claims and are *anticipated* by the patent claims. Also, it would have been obvious to a person of ordinary skill in the art to omit the thickness detail of the liquid crystal (LC) layer of the liquid crystal display (LCD) device of the patent claims when such detail is not critical for the LCD device.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

> applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimura et al.

Note Example 6 which identically discloses the claimed LCD device comprising a mixture ratio of a liquid crystal and a transparent resin being 5:5 or 1:1 (col. 14, lines 39-63). It is noted that line 40, col. 14, the 600 A of ITO should be "transparent picture element electrode", instead of "a transparent substrate" (an obvious typographical error, as apparent from Examples 3 and 5). Also, note Example 7 which discloses a mixture ratio of the LC and the transparent resin being 2:1 or 4:2.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakai et al (US 5,003,356) in view of Kobayashi et al (US 5,305,126) both cited by Applicant.

Wakai et al disclose in Figs. 3 and 5 a LCD device, similar to that of the instant claims, including a smoothing film 108 (col. 4, lines 15-20). The only difference between the LCD device of Wakai and that of the instant claims is a liquid crystal (LC) being dispersed in a transparent resin (polymer dispersed liquid crystal, PDLC). Kobayashi et al disclose in the Sixth Embodiment that it was known to employ a LCD device

comprising thin film transistors (TFTs) and PDLC (col. 16, line 25 – col. 17, line 52). Further, Kobayashi et al disclose that the optimum amount of the LC employed in the mixture is in the range between 50% and 97% (col. 17, lines 17-19). Thus, it would have been obvious to a person of ordinary skill in the art in view of Kobayashi et al to employ a PDLC with a mixture ratio of the LC and the transparent resin being 4:6 to 8:2 in Wakai's LCD device for obtaining a bright display device with good response to the applied electric field and good contrast.

Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al'945 in view of Applicant's Prior Art Admission (APAA).

The only difference between Kimura's LCD device and of the instant claims is the LCD having a memory property. See discussions of Kimura in the above 102 rejection. As is well-known in the art, ferroelectric and antiferroelectric LC devices have a memory property (see Jono et al, US 5,078,477, cited by Applicant). APAA discloses that a PDLC device using a ferroelectric LC material is known (specification, page 7, lines 12-21). Thus, it would have been obvious to a person of ordinary skill in the art in view of APAA to employ a ferroelectric LC material as the LC in the PDLC display device of Kimura et al for obtaining a display device having a memory property and rapid response.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number 703 308-4873.

TD

TVD
2/10/04

TOAN TON
PRIMARY EXAMINER